

## Garberville Town Area Groundwater Basin

- Groundwater Basin Number: 1-32
- County: Humboldt
- Surface Area: 2,100 acres (3 square miles)

### Basin Boundaries and Hydrology

The Garberville Town Area Groundwater Basin occupies the small alluvial valley in which the community of Garberville is located. North of Garberville the basin is bounded by Tertiary marine sedimentary rocks of the Wildcat series. The Wildcat series is a group of five formations ranging in age from Miocene to Pleistocene consisting of sandstone, marine siltstone, and claystone (Evenson 1959). In the general vicinity of Garberville, the basin is bounded by deposits of the Franciscan Formation and Upper Cretaceous marine sedimentary rocks (Strand 1962). Basin deposits consist of Quaternary alluvium. Annual precipitation ranges from 57- to 63-inches.

### Hydrogeologic Information

Hydrogeologic information was not available for the following:

***Water-Bearing Formations***

***Groundwater Level Trends***

***Groundwater Storage***

### Groundwater Budget (Type B)

The estimate of groundwater extraction for the Garberville Town Area Basin is based on a 1996 survey conducted by the California Department of Water Resources. The survey included land use and sources of water. Groundwater extraction for agricultural use is estimated to be 3 acre-feet. Groundwater extraction for municipal and industrial uses is estimated to be 67 acre-feet. Deep percolation of applied water is estimated to be 89 acre-feet.

### Groundwater Quality

#### Water Quality in Public Supply Wells

Constituent Group <sup>1</sup>	Number of wells sampled <sup>2</sup>	Number of wells with a concentration above an MCL <sup>3</sup>
Inorganics – Primary	2	0
Radiological	1	0
Nitrates	4	0
Pesticides	0	0
VOCs and SVOCs	1	0
Inorganics – Secondary	2	0

<sup>1</sup> A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).

<sup>2</sup> Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.

<sup>3</sup> Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the

types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

## Well Production characteristics

Well yields (gal/min)		
Municipal/Irrigation	NKD	
Total depths (ft)		
Domestic	Range: 60 - 382	Average: 160 (8 Well Completion Reports)
Municipal/Irrigation		
NKD – No known data		

## Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	NKD
Department of Health Services	Miscellaneous water quality	5

## Basin Management

Groundwater management:	No known groundwater management plans, groundwater ordinances, or basin adjudications.	
Water agencies		
Public	Redway Community Service District	
Private	Garberville Water Company.	

## Selected References

- Evenson, R.E. 1959. Geology and Groundwater Features of Eureka Area, Humboldt County, California. USGS Water Supply Paper 1470.
- Fratlicelli LA, Albers JP, Irwin WP, Blake MC. 1987. Geologic Map of the Redding 1 x 2 Degree Quadrangle, Shasta, Tehama, Humboldt, and Trinity Counties, California. USGS. OF-87-257.
- Irwin WP. 1960. Geologic Reconnaissance of the Northern Coast Ranges and Klamath Mountains, California. California Division of Mines and Geology. Bulletin 179.
- Strand RG. 1962. Geologic Map of California, [Redding Sheet]. Scale 1:250,000. California Division of Mines and Geology.

## Bibliography

- Bailey EH. 1966. Geology of Northern California. California Division of Mines and Geology. Bulletin 190.
- California Department of Water Resources. 1975. California's Ground Water. California Department of Water Resources. Bulletin 118.
- California Department of Water Resources. 1980. Ground Water Basins in California. California Department of Water Resources. Bulletin 118-80.
- Dickinson WR, Ingersoll RV, Graham SA. 1979. Paleogene Sediment Dispersal and Paleotectonics in Northern California. Geological Society of America Bulletin 90:1458-1528.
- Planert M, Williams JS. 1995. Ground Water Atlas of the United States, Segment 1, California, Nevada. USGS. HA-730-B.

## Errata

Changes made to the basin description will be noted here.